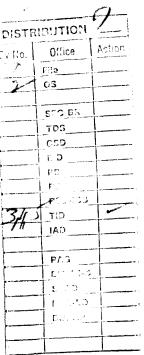
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- 1. THE MATERIAL PROVIDED, THREE SETS EACH CONTAINING FOUR DIFFERENT FOG DENSITY LEVEL TESTS (NORMAL, 10 PER CENT FOG, 20 PER CENT FOG, 40 PER CENT FOG), HAS BEEN EVALUATED BY TECHNICAL ANALYSTS AND PHOTO INTERPRETERS WITH THE FOLLOWING RESULTS.
- 2. NO ACTUAL LOSS IN INFORMATION CONTENT BETWEEN THE FOUR DIFFERENT FOG LEVELS OF THE SAME SCENE WAS DETECTED.
- 3. AS THE FOG LEVEL INCREASES AND THE CONTRAST IS THEREBY REDUCED, ADJACENT AREAS OF SLIGHT TONAL DIFFERENCE TEND TO BLEND TOGETHER MAKING THE SEPARATION HARDER TO DETECT. INTER-PRETATION THUS BECOMES MORE DIFFICULT.
- 4. USUALLY THE NORMAL DUPLICATE POSITIVE WAS PREFERRED OVER THE FOGGED DUPLICATE POSITIVE BECAUSE OF ITS HIGHER CONTRAST AND THEREFORE, BETTER APPARENT RESOLUTION. IN A FEW CASES, HOWEVER, THE INTERPRETERS PREFERRED THE 10 PER CENT FOG LEVEL DUPLICATE POSITIVE SINCE IT WAS FELT THAT THE CONTRAST OF THE NORMAL DP, IN THESE CASES, WAS SLIGHTLY HIGH. THIS WAS ESPECIALLY TRUE WHEN THE HALATION OF SPECULAR OBJECTS WAS IN-VOLVED.

Declassification Review by NGA/DoD



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- 5. IT IS FELT THAT THE LARGE SCALE (1:1937) OF THE IMAGERY PROVED TO BE AN IMPORTANT FACTOR IN THE FOREGOING CONCLUSIONS SINCE THE INTERPRETERS EXPERIENCED DIFFICULTY IN LOCATING DETAIL SMALL ENOUGH TO DISPLAY A LOSS DUE TO AN INCREASE IN FOG LEVEL. IT IS POSSIBLE THAT HAD THE TEST BEEN RUN USING OPERATIONAL TYPE, SMALLER SCALE PHOTOGRAPHY, A LOSS OF INFORMATION WOULD HAVE BEEN EXPERIENCED.
- 6. IN SUMMATION, NO LOSS IN THE INFORMATION CONTENT AT THIS SCALE DUE TO THE INCREASED FOG LEVEL WAS DETECTED ALTHOUGH INTERPRETATION GENERALLY BECAME MORE DIFFICULT AS THE FOG LEVEL INCREASED.

TOPSECRET

-END OF MESSAGE-